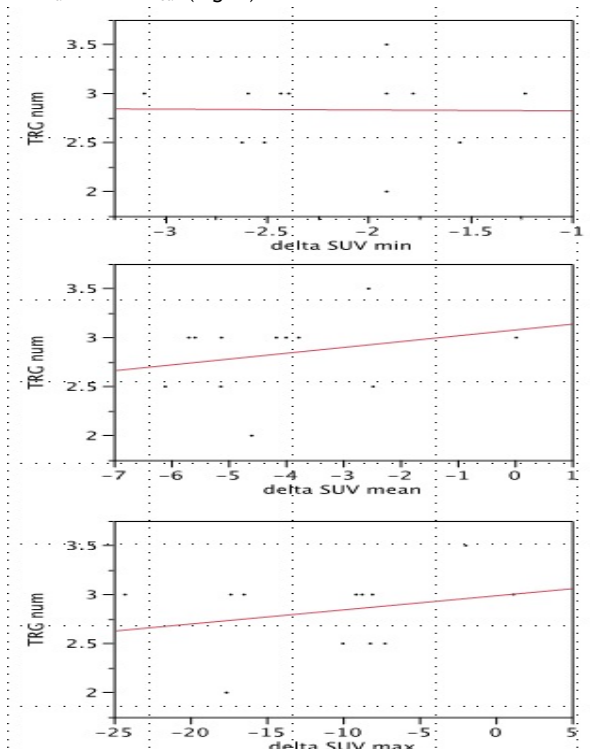


regression analysis showed an interesting, but not statistically significant trend: better pathological responses were seen in patients presenting more important reduction of  $SUV_{max}$  and  $SUV_{mean}$  (Fig. 1).



**Conclusions:** These preliminary prospective data seem to support the hypothesis that changes of some  $^{18}F$ FDG-PET/CT values, as  $SUV_{max}$  and  $SUV_{mean}$ , could predict the pathological response in locally advanced rectal cancer after neoadjuvant treatments. Further analyses are needed.

#### EP-1217

**SIB-IMRT combined with concurrent chemotherapy for anal cancer: 4-year results of a consecutive case series**

P. Franco<sup>1</sup>, F. Arcadipane<sup>1</sup>, M. Segantin<sup>1</sup>, F. Munoz<sup>1</sup>, F. Migliaccio<sup>2</sup>, P. Sciacero<sup>3</sup>, M. Mistrangelo<sup>4</sup>, V. Angelini<sup>5</sup>, P. Racca<sup>6</sup>, M. Morino<sup>4</sup>, P. Cassoni<sup>7</sup>, U. Ricardi<sup>5</sup>

<sup>1</sup>Ospedale Molinette University of Turin A.O.U. San Giovanni Battista di Torino, Radiation Oncology Department, Torino, Italy

<sup>2</sup>AUSL Valle d'Aosta, Radiation Oncology Department, Aosta, Italy

<sup>3</sup>Ivrea Community Hospital, Radiation Oncology Department, Ivrea, Italy

<sup>4</sup>Ospedale Molinette University of Turin A.O.U. San Giovanni Battista di Torino, Digestive Surgery Department, Turin, Italy

<sup>5</sup>Ospedale Molinette University of Turin A.O.U. San Giovanni Battista di Torino, Radiation Oncology Department, Turin, Italy

<sup>6</sup>Ospedale Molinette University of Turin A.O.U. San Giovanni Battista di Torino, Oncology Department, Turin, Italy

<sup>7</sup>Ospedale Molinette University of Turin A.O.U. San Giovanni Battista di Torino, Pathology Department, Turin, Italy

**Purpose/Objective:** To report the 4-year outcomes of a consecutive prospective series of anal cancer patients treated with concurrent chemo-radiation delivered with intensity-modulated radiotherapy (IM-RT), employing a simultaneous integrated boost (SIB) approach.

**Materials and Methods:** A prospective series of 54 patients was enrolled between 2007 and 2013. Treatment schedule consisted of 50.4 Gy/28 fractions (1.8 Gy daily) to the gross tumor volume, while the elective nodal volumes were prescribed 42 Gy/28 fractions (1.5 Gy/daily) for patients having a cT2N0 disease. Patients with cT3-T4/N0-N3 tumors were prescribed 54 (T3) or 59.4 (T4) Gy/30 fractions (1.8 Gy daily) to the gross tumor volume; gross nodal volumes were prescribed 50.4 Gy/30 fr (1.68 Gy daily) if sized  $\leq 3$  cm or 54 Gy/30 fr (1.8 Gy daily) if  $> 3$  cm; elective nodal regions were given 45 Gy/30 fractions (1.5 Gy daily). Chemotherapy was administered concurrently according to the Nigro's regimen. Primary endpoints was colostomy-free survival (CFS). Secondary end-points were local control (LC), disease-free survival (DFS), cancer-specific survival (CSS), overall survival (OS) and toxicity profile.

**Results:** Median follow up was 32.6 months (range 12-84). The actuarial probability of being alive at 4 years without a colostomy (CFS) was 68.9 % (95% CI: 50.3-84.7%). Actuarial 4-year OS, CSS, DFS and LC were 77.7% (95% CI: 60.7-88.1%), 81.5% (95% CI: 64-91%), 65.5% (95% CI: 47.7-78.5%) and 84.6% (95% CI: 71.6-92%). Actuarial 4-year metastasis-free survival was 74.4% (95% CI: 55.5-86.2%). Maximum detected acute toxicities were as follows: dermatologic - G3: 13%; GI-G3: 8%; GU-G3: 2%; anemia-G3: 2%; neutropenia-G3:11%; G4: 2%; thrombocytopenia- G3:2%. Four-year G2 chronic toxicity rates were 2.5% (95% CI: 3.6-16.4) for GU, 14.4% (95% CI: 7.1-28) for GI, 3.9% (95% CI: 1-14.5%) for skin and 4.2% (95% CI: 1.1-15.9) for genitalia.

**Conclusions:** Our findings support the feasibility of IMRT in the combined modality treatment of anal cancer, with comparable results to the literature with respect to local control, sphincter preservation and survival. Acute toxicity is lower if compared to series employing standard techniques. Our results support the use of IMRT on a routine basis for the treatment of anal cancer.

#### EP-1218

**Adjuvant radio-chemotherapy after extended or simple cholecystectomy in gallbladder cancer**

M. González Domingo<sup>1</sup>, O. Giannini Tassara<sup>1</sup>, P. González Mella<sup>1</sup>, E. Loredó F<sup>2</sup>, M.E. Vasquez<sup>3</sup>

<sup>1</sup>Instituto Oncológico, Department of Radiation Oncology, Viña del Mar, Chile

<sup>2</sup>Clínica Reñaca, Department of Oncology, Viña del Mar, Chile

<sup>3</sup>Hospital Naval, Department of Oncology, Viña del Mar, Chile

**Purpose/Objective:** To analyze results of combined treatment of adjuvant radio-chemotherapy in patients diagnosed with gall-bladder cancer after complete resection. **Materials and Methods:** Since June 1993 until March 2013, 87 patients with the diagnosis of gallbladder cancer who underwent extended or simple cholecystectomy and were staged as T1b-2-3N0-1M0, received adjuvant radio-chemotherapy at Instituto Oncológico, Viña del Mar. Overall survival and median survival were analyzed in relation to different prognostic factors, using Kaplan-Meier techniques